



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/829,466

04/21/2004

Yi-Fen Chen

10033.001000

6418

31894 7590 06/26/2008  
OKAMOTO & BENEDICTO, LLP  
P.O. BOX 641330  
SAN JOSE, CA 95164

EXAMINER

TRUONG, THANHNGA B

ART UNIT

PAPER NUMBER

2135

MAIL DATE

DELIVERY MODE

06/26/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/829,466	<b>Applicant(s)</b> CHEN ET AL.	
	<b>Examiner</b> Thanhnga B. Truong	<b>Art Unit</b> 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is responsive to the communication filed on February 20, 2008. Claims 1-20 are pending. At this time, claims 1-20 are still rejected.

#### ***Response to Argument***

2. Applicant's arguments filed February 20, 2008 have been fully considered but they are not persuasive.

Applicant argues that:

"Borella is silent as to using a kernel driver to modify packets."

Examiner respectfully disagrees with the applicant and still maintains that:

Borella teaches the claimed subject matter as set forth in claim 10. In fact, Borella teaches Network Interface Card (NIC) driver for the hardware network devices connecting the network devices to the computer network (see Figure 2 and more details in column 8, lines 30-40; column 14, line 56 through column 15, line 17 of Borella). In order to use the network card, one will need to load the proper driver. This may be accomplished in one of two ways. The easiest way is to simply load a kernel module driver for the network card with, e.g., `kldload(8)`. A module is not available for all network card drivers (ISA cards and cards using the `ed(4)` driver, for example). Alternatively, user may statically compile the support for user's card into user's kernel. Thus, Borella teaches the use of the kernel driver for modifying packets.

Applicant further argues that:

"Borella does not teach or suggest packet modification before initialization of a network-enabled application in the first computer. Neither does Albert as both Albert and Borella pertain to data transmission among fully initialized computers. It is respectfully submitted that the combination of Borella and Albert does not teach or suggest modifying DHCP packets intended for a DHCP server, let alone at a first computer prior to initialization of a network-enabled application in the first computer."

Examiner respectfully disagrees with the applicant and still maintains that:

The combination of teaching between Borella and Albert teaches the claimed subject matter as set forth in claim 17. In fact, Borella teaches the modification of the packets as shown in column 3, lines 37-42; column 4, lines 23-35 of Borella. Furthermore, Borella does suggest data and/or packets being redirected via NAT router for translating every inbound and outbound data packet (column 2, lines 21-48 of Borella). However, Albert correctly teaches data packet's redirection in Figures 6 and 10F and further details in column 16, lines 27-41; column 28, lines 34-50 of Albert. For the DHCP packets being modified, Borella discloses in column 3, lines 37-42; column 4, lines 23-35; and column 10, lines 5-14 of Borella.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, based on the above explanation, the combination of teaching between Borella and Albert is efficient and proper.

Borella and Albert do not need to disclose anything over and above the invention as claimed in order to render it unpatentable or anticipate. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claimed limitations.

The fact that Examiner may not have specifically responded to any particular arguments made by Applicant and Applicant's Representative, should not be construed as indicating Examiner's agreement therewith.

For the above reasons, it is believed that the rejections should be sustained.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 10, 12-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Borella et al (US 7,028,335 B1).

a. Referring to claim 10:

i. Borella teaches a system for controlling traffic in a computer network, the method comprising:

(1) a first computer including a kernel driver, the kernel driver being configured to modify a packet generated at the first computer (**column 3, lines 37-42; column 4, lines 23-35 of Borella**), the packet being intended for a second computer and being modified to be forwarded from the first computer to a third computer (**column 3, lines 24-25; column 21, lines 51-53; column 4, lines 41-45 of Borella**).

b. Referring to claims 12-15:

i. These claims have limitations that is similar to those of claims 2-6, 8-9, thus they are rejected with the same rationale applied against claims 2-6, 8-9 below.

***Claim Rejections - 35 USC § 103***

Art Unit: 2135

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-6, 8-9, 17, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borella et al (US 7,028,335 B1), and further in view of Albert et al (US 6,650,641).

a. Referring to claim 1:

i. Borella teaches a method of controlling traffic in a computer network, the method comprising:

(1) modifying a data unit to be sent by a first computer, the data unit being intended for a second computer, the data unit being modified such that the data unit is redirected from the first computer to a third computer (**column 3, lines 37-42; column 4, lines 23-35 of Borella**), the data unit being generated in and originating from the first computer and being sent by the first computer to connect to the computer network (**column 4, lines 45-55 of Borella**);

(2) sending the data unit from the first computer to the third computer (**column 3, lines 24-25; column 21, lines 51-53 of Borella**); and

(3) forwarding the data unit from the third computer to the second computer (**column 4, lines 41-45 of Borella**).

ii. Borella does suggest data and/or packets being redirected via NAT router for translating every inbound and outbound data packet (**column 2, lines 21-48 of Borella**). However, Albert correctly teaches data packet's redirection in Figures 6 and 10F and further details in **column 16, lines 27-41; column 28, lines 34-50 of Albert**.

iii. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1) have modified or clearly addressed the NAT's translation in Borella with the teaching of Albert for redirecting data packet to a specific computer and/or server **(column 16, lines 40-41 of Albert)**.

iv. The ordinary skilled person would have been motivated to:

(1) have modified or clearly addressed the NAT's translation in Borella with the teaching of Albert for performing network address translation using a service manager and a forwarding agent, wherein forwarding agent can redirect traffic from client sent to a virtual IP address to a real IP address selected by the service manager and may also direct the traffic to a different port on the real machine at the real IP address then the port specified by the client **(column 3, lines 52-53 and column 28, lines 39-43 of Albert)**.

b. Referring to claim 2:

i. Borella teaches:

(1) wherein the data unit is selected to be modified based on an intended destination of the data unit **(column 3, lines 37-42; column 4, lines 23-35 of Borella)**.

c. Referring to claim 3:

i. Borella teaches:

(1) wherein the data unit is modified in the first computer prior to initialization of a network-enabled application in the first computer **(column 3, lines 37-42; column 4, lines 23-35 of Borella)**.

d. Referring to claim 4:

i. Borella teaches:

(1) wherein the data unit comprises an Ethernet packet **(column 8, lines 20-36 of Borella)**.

e. Referring to claim 5:

i. Borella teaches:

(1) wherein a destination address field of the data unit is modified to contain an address of the third computer in a destination address field and an address of the second computer in another portion of the packet **(column 19, lines 3-15 of Borella)**.

f. Referring to claim 6:

i. Borella teaches:

(1) wherein the second computer comprises a DHCP (Dynamic Host Configuration Protocol) server **(column 10, lines 5-14 of Borella)**.

g. Referring to claim 8:

i. Borella teaches:

(1) wherein the data unit is quarantined at the third computer **(column 3, line 60 through column 4, line 11 of Borella)**.

h. Referring to claim 9:

i. Borella teaches:

(1) the third computer is selected to receive the data unit based on an intended destination of the data unit **(column 3, lines 7-18 of Borella)**.

i. Referring to claims 17, 19-20:

i. These claims have limitations that is similar to those of claims 1-9, thus they are rejected with the same rationale applied against claims 1-9 above.

7. Claims 7, 11, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borella et al (US 7,028,335 B1), in view of Albert et al (US 6,650,641), and further in view of Schwering (US 6,717,943 B1).

a. Referring to claims 7, 11, 16, and 18:

i. The combination of teaching between Borella and Albert teaches the claimed subject matter. Although Borella discloses denied of service attacks and its controlling attacks, Borella is silent on the capability of showing scanning the data packet for viruses. On the other hand, Schwering teaches scanning the data unit for viruses **(column 8, lines 9-10; lines 19-23 of Schwering)**.



***Conclusion***

8. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhnga (Tanya) Truong whose telephone number is 571-272-3858.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached at 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

/Thanhnga B. Truong/  
Primary Examiner, Art Unit 2135

TBT

June 16, 2008

Application/Control Number: 10/829,466  
Art Unit: 2135

Page 9